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CHAPTER VIII

POTTERY

METHODS OF COOKING FOOD OF THE ANCIENT KAMCHADAL

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At present the Kamchadal do not make clay pots. Until recently the opinion was widespread that they were not familiar with pottery, even in former times. Steller[1] and Krasheninnikoff,[2] in speaking of the ancient Kamchadal method of cooking food, mention only boiling in wooden troughs by means of red-hot stones, and there is nowhere in the writings of these authors a reference to clay vessels. Schrenk[3] considers the absence of pottery among the Kamchadal as proved. He contends also that pottery was unknown to any of the so-called Palæ-Asiatic peoples, with the exception of the Eskimo, whom he classes among them.

We wish to clear up the contradiction between the statements of some travelers, that the old Kamchadal cooked food in wooden troughs by means of red-hot stones and our archæological finds of clay vessels.

Both means of cooking food, by boiling it in wooden troughs and in clay pots, were used. Pottery vessels were used in the permanent winter dwellings, while wooden troughs were used when traveling in winter or moving to fishing places in summer. Clay pots, being light breakable vessels, were not carried along, either by dog-teams or in canoes.

We must admit that Krasheninnikoff and Steller had no chance to observe cooking in clay pots, or to see the Kamchadal pottery, although that may appear improbable, when considering their long stay in Kamchatka and their ample and interesting description of the life of the Kamchadal in all other respects. As to the cooking in wooden troughs, both Krasheninnikoff (I, p. 362; II, pp. 38, 45, 46 and 74) and Steller (p. 322 and App., p. 36) describe in detail how fish and meat of land and sea animals were cooked with edible roots and other vegetables.

R. Torii says that the Sakhalin Ainos made clay pots and at the same time used dug-out trunks for boiling meat and fish in water heated by red-hot stones. He relates the same concerning the Kurilian Ainos. While moving for fishing and hunting purposes from one island to another and not being able to carry with them breakable pottery, they cooked their meals by means of hot stones put in wooden troughs filled with water.[4]

[1] G. W. Steller, *Beschreibung von dem Lande Kamtschatka*, Frankfurt und Leipzig, 1774.

[2] S. P. Krasheninnikoff, *Description of the Land Kamchatka*, vols. I–II, 1819, St. Petersburg (in Russian).

[3] Leopold von Schrenk, *Reisen und Forschungen im Amur-Lande*, Band II, St. Petersburg, 1857, p. 138.

[4] See R. Torii, *Étude Archéologiques et Ethnologiques: Les Ainos des Iles Kouriles*, Journal College of Science Imperial University of Tokyo, vol. XLII, Tokyo, 1919–1921 p. 194.

The method of boiling water by means of red-hot stones is known among many peoples—the Eskimo, Polynesians, New Zealanders and others. The Kamchadal of central Kamchatka, says Bogoras (*The Chukchee*, p. 194), even now extract fish-oil by trying out the fish in a dug-out with heated stones. The same was told by Dittmar of the Kamchadal of the village Khuchi on the Kamchatka River (Carl von Dittmar, *Reisen und Aufenthalt in Kamtschatka in den Jahren 1851–1855*, p. 326, St. Petersburg, 1890, Part I). In the work of Dr. Aurel Krause (*Die Tlinkit Indianer, Ergebnisse einer Reise nach der Nordwestküste von Amerika und der Beringstrasse*, Jena, 1885, p. 178) there is an illustration showing how the Tlinkit get fish-oil from the salmon *Thaleichtys pacificus* by boiling it in a dug-out heated with stones. In northern European Russia and Siberia beer is prepared by the same method (see L. S. Berg, *The Discovery of Kamchatka and Bering's Expeditions*, Leningrad and Moscow, 1924, p. 12, in Russian).

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that they had been lamps, and not cooking pots; but this opinion may be offset by the shape, size and, especially, the depth of the pots found.[1]

Witsen, based on information received from cossacks, stated that the Kamchadal used clay vessels.[2] The Cossack Atlassov,[3] mentioned above, says in his report to the Government that the Kamchadal made pottery in his time.[4]

We see that before our excavations there were some indications as to the former pottery-making of the Kamchadal, but these were somewhat vague. Our diggings furnished more definite data concerning the Kamchadal types and methods of manufacturing pottery. We discovered two kinds of coarse clay vessels—with handles inside and with holes near the upper rim of the pots—and a kind of more elaborate ceramics with outer ornamental designs.

POTS OR PANS WITH EARS INSIDE

Fragments of pottery with handles inside were found by the writer in many diggings of the central and southern parts of Kamchatka, and he was fortunate to discover one complete pot in a pit on the shores of the Nalacheva Lake and another on the Nalacheva Cape (see Plate 17, figs. 1, 3). We may say that not only the wheel was unknown to the Kamchadal manufacturer of this rude kind of pottery, but neither the coil method nor the basket modeling process was applied by him, though there remained some impressions of basketry on the outer side. It seems that the vessels were worked out from single blocks of clay and beaten into shape. It is the crudest pottery. The dimensions of figure 1 have been given before (see p. 48). The thickness is about a third of an inch. It is difficult to say whether this kind of pottery was especially burnt before being used or was baked by the fire while cooking. The fact that these vessels remained intact after having been long buried under the ground proves that they were solidly made and water-tight. Being smeared with fat and blackened by smoke, they received a coating against water, which may be compared with the glaze of higher types of pottery. To make the clay more resistent it was tempered with sand, gravel and the hair of sables' tails.[5] The Cossack Atlassov, when presenting to the Government the tribute of the Kamchadal in sable-skins, delivered many of them without tails. In apologizing he said that the Kamchadal make boas of sables' tails and used the hair for tempering clay.

There is no doubt that the inside ears were intended for suspending the pot over the fire, as they afforded better protection to the suspending cord or thong than those outside the pan.

[1] Carl von Dittmar, *Reisen und Aufenthalt in Kamchatka in den Jahren 1851–1855*, St. Petersburg, Part I, p. 218. Dittmar gives the following measurements of a pot: upper diameter, 12 cm.; lower diameter, 10 cm.; maximum width, 14 cm.; depth, 10 cm. This vessel, therefore, had an aperture smaller in diameter than the middle part, and its bottom was still smaller than the aperture. Clay lamps are of a quite different shape, as shown by Bogoras, Nelson and other explorers of the northern regions.

[2] Nicolaas Witsen, *Noord en Oost Tartarye*, Amsterdam, vols. I–II, 2d ed., 1705, p. 873 (1st ed., 1692).

[3] See before p. 1.

[4] See G. Spasky, *Vladimir Atlassov the Conqueror of Kamchatka*, Jour. Imperial Russian Geographical Society, 1858, vol. XXIII, p. 164 (in Russian).

[5] Munro (*Prehistoric Japan*, p. 196) supposes that grass was mixed by the Kurilians in their primitive pottery, the clay of which became black, due to the carbonization of the grass. R. Torii (*Les Ainou des Iles Kouriles*, p. 188), referring to information received from old Kurilian people, says that the ancient Kurilian Ainos tempered clay for pottery with sand and minced grass called "nokkanki."

1. [The end of the 17th Century -- Analysis]

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171 Aino clay pots referred to above.[1] Such iron pots, says Munro, have been found in the pits of Hokkaido (Yezo) with wares of wood and implements of stone.[2] 415 The Yezo Ainos, he says in another place, have long been accustomed to use iron pots from Japan or Siberia, some of which had handles inside, and it is reasonable to suppose that the clay pan with handles inside was copied from the useful iron model. I wish to add to this statement that nowhere in Siberia have I seen iron pots with handles inside, and there is no doubt that such iron pots were made in Japan and copied from the more primitive model, the clay pot, and not the reverse.[3]

415 172 Plate 17, figure 2, shows the upper part of a clay pot, the three fragments of which I cemented together and which had no handles. The height of the pot and the shape of the bottom, whether flat or conical, are unknown. As this pot has no handles or holes for suspension, one may suppose that the bottom was flat, intended to rest amid the burning logs and in the ashes of the primitive hearth, which was the ground and sometimes had an enclosure of stones to confine the fire. This pot looks somewhat smoother than the pans with handles inside and its rim is decorated with four parallel lines. It was probably deeper than the shallow pans, but it was made of the same coarse clay and not subjected to a special burning. The decorative lines were made when the clay was still wet, by a bone instrument like that shown on Plate 16, figure 10. Fragments of upper parts of clay pots with decorative parallel lines are shown on Plate 18, figure 2.

A DIFFERENT KIND OF POTTERY TO THE NORTH OF KAMCHATKA

415 ● 323 171 172 Fragments of a different kind of clay pots were found by the author in the excavations of northern Kamchatka. Plate 19, figure 1, shows pottery fragments of the Kulki site and figure 2 of the Kavran site. The majority of these fragments seems to be from small vessels, the clay to be burnt, and the pots more decorated than those of southern Kamchatka. In some cases impressions of baskets or ropes may be seen, but most of the decorations, consisting of dots, lines, zigzags and other figures, were made by the hand by means of bone or wooden implements. Holes were found in many of the pottery fragments. The holes were made differently for particular purposes; those near the upper rim were made by an awl, when the clay was still wet, and intended to serve as loops for cords or thongs for suspension over the hearth. Other holes were made by a drill in order to mend broken pieces by tying them with sinew threads and smearing over the broken lines with clay. On Plate 19, figure 1, are shown both kinds of holes on two fragments. Going farther to the north we may point to a restored clay pot, from fragments found by the writer while digging an old Koryak site. The mouth of the pot had a diameter of about 27 cm., its height must have been approximately 27 cm., and the walls were 4 to 8 mm. thick. All potsherds found in the Koryak[4] territory are quite thin, so that their manufacture had little in

[1] It must be noted that the iron pot in figure 82 has, besides inside loops, three feet evidently for putting the vessel on a table or bottom for eating.

[2] Cited from Professor Torbei, Tokyo Anthropological Magazine, No. 16, June 1887.

[3] The Siberian iron and copper pots and kettles, manufactured chiefly in European Russia, have handles outside the vessels or on their upper rims.

[4] See the author's work, *The Koryak*, p. 640, fig. 188.

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common with that of the thick and clumsy clay lamps and unbaked quadrangular kettles of the modern Chukchee and Asiatic Eskimo. The potsherds found in the Koryak excavations were black from soot and fat, and were evidently well baked, as they remained strong and hard, although they had been lying in the wet soil. All these potsherds were made of coarse clay containing fine gravel and pieces of quartz. The Koryak pot referred to above was molded by hand, and all over the outside are the impressions of closely woven, twined basketry. Evidently this impression was made by taking a piece of twined fabric in one hand and pressing it against the moist pot, the twined woof being placed so that the lines ran at right angles to the rim. The pot had a conical bottom and it is possible that it was intended to be supported by stones or to rest in a cavity of the hearth.[1]

Proceeding farther to the north we find among the Chukchee and the Asiatic Eskimo a pottery somewhat like that of the Alaskan Eskimo. Their elongated rectangular form is adapted to the shape of the lamp over which it is hung in cooking. It may be that this form of pottery came to Alaska from Asia. Some clay kettles of the same shape from St. Lawrence Island are among the collections of the U. S. National Museum of Washington.

[1] We have seen before (p. 30) that neolithic sites in the Baikal Region yielded clay pots with a conical bottom which were supported on the hearth by stones. Professor Petri contends that pottery with flat bottoms appeared chiefly in the iron age. The pot with a conical bottom found by the earliest in a site of the Koryak territory may support Petri's supposition. On the other hand a fragment of a clay pot with a flat bottom from a neolithic site of the Ainos is shown in figure 77.

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JOCHELSON PLATE 22

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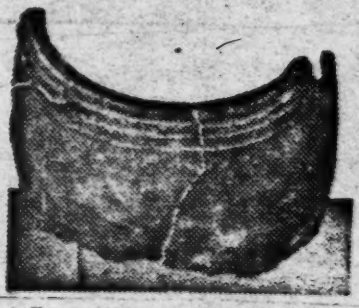

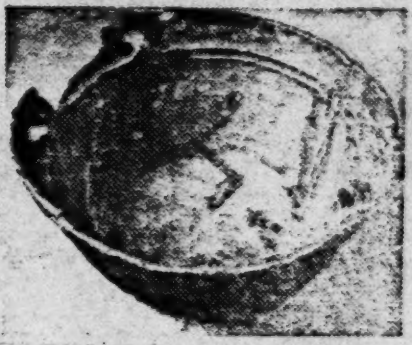

1. Clay pot with ears inside; discovered by the author in a pit of an old Kamchadal dwelling on the shore of Nalocheva Lake. The pot was split in two places, but complete, and later cemented by the author. The splitting may be regarded as a result of freezing and thawing of the soil. It was discovered at the depth of 3 feet 4 inches. Digging was done with great care. When a piece of the rim appeared, the spade was discarded and the earth from and around the pot was taken out by the hands. For the dimensions of the pot see p. 4b.
2. Similar clay pot of smaller size, discovered in a pit on the Nalocheva Cape.
3. Portion of upper part of a clay pot without handles inside. It consists of three fragments cemented together by the author. No other pieces of the same pot were discovered and we do not know whether its bottom was flat or rounded. Outer parallel lines made by a comb-like implement are similar to inner parallel lines of pots with handles inside.

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Fragments of clay pots, some with ears inside. From Naiezheva Cape, Naiezheva Lake, and shores of Kuril Some of these fragments have no parallel lines inside.

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PLATE

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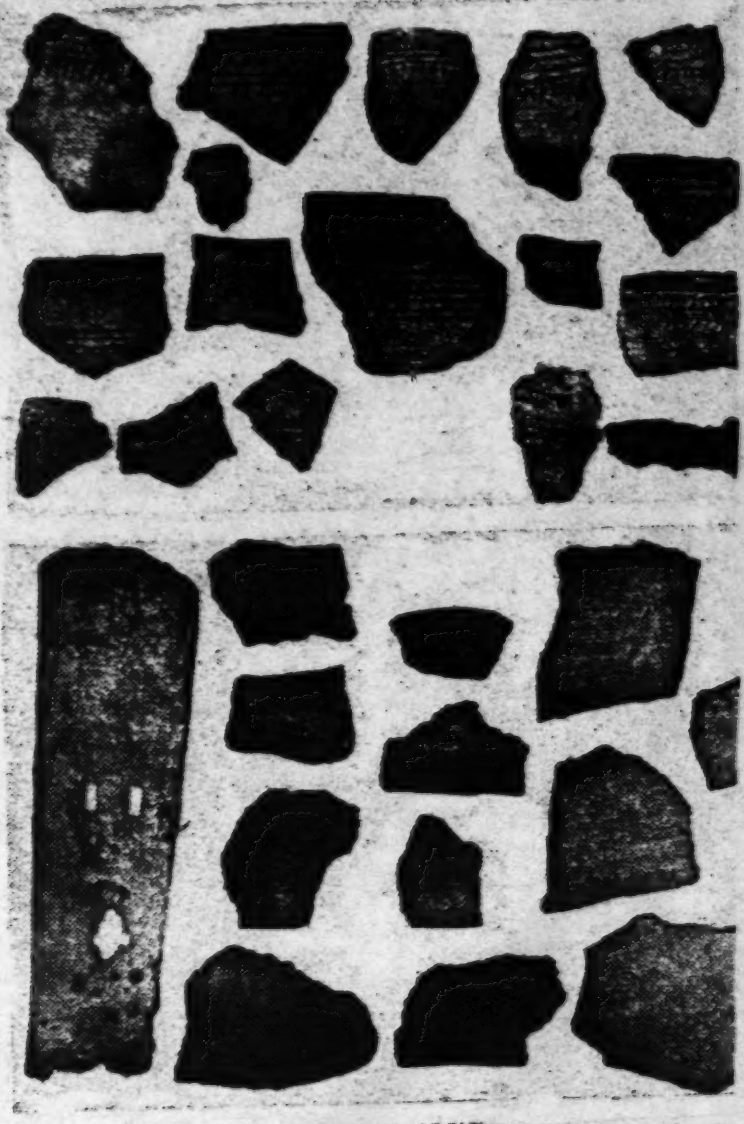

A (3704). 10 fragments of pottery discovered in the site of Kudki River.
B (3669-3673). 12 fragments of pottery found in excavations of the banks of Kovran River and a fragment of some bone implement.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian.

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737–1742) and G. Steller (1740–44).

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens.

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture.

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks.

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish.

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils.

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison.

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden

/449 cont./ Mamia Rinsô (4),
323 171 to be sure, reports about the Ainu of southern Sakhalin that they
A 323 [177] make earthenware vessels, and, to be sure, of two kinds, the one of about six to seven inches in diameter with ears on two sides, tojes'ju, i.e., earthen pans, the other called kamui'sju, i.e., divine pans, but one cannot fail to recognize the recent
A [175] [172] [415] Japanese origin of this art. In the seventeenth century, when Vries and his companions discovered Jesso and the nearby Kurile Islands, they saw the inhabitants of them eating from lacquered wooden bowls /450/ and quadrangular troughs (1), and just such

A [113]

1. Siebold, Aardr. en volkenkund. toelicht. tot de ontdekk. van Vries /Geographical and Ethnographical Explanations from the Discoveries by Vries/, P. 108.

bowls, but no earthenware vessels, are among the articles that Poljakof found, besides skulls and bones, in old Ainu graves on Sakhalin and presented to our museum. Concerning the ancient
G 321 171 Kamchadal, one finds, to be sure, in the report of the Cossack Atlassof published by Witsen (2), the information that they

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2. Noord en Oost Tartarye, ed. of 1705, p. 673.

manufacture for their own use earthenware and wooden vessels, but the former are more than questionable. Steller and
K [172] Krascheninnikof saw only wooden vessels among them, and Ditmar (3), while digging on the sites where their yurts had once

K [113]

3. "Reisen und Aufenthalt in Kamschatka in den Jahren 1851-1855 /Travels and Residence in Kamchatka in 1851-1855/" (Beitr. zur Kenntn. des Russ. Reiches, third series, Vol. VII, p. 246).

stood, only once found, among numerous stone tools, a small piece of earthenware, which crumbled in his hands because it had not been fired, or at most only slightly, and which he thought was a train-oil lamp shaped by hand.

4. Op. Cit., P. 184.